

### **REMARKS**

This responds to the Office Action mailed on December 15, 2005.

Claims 1-30 are now pending in this application.

No rejection of claim 30 was asserted by the Office.

#### **Clarification on Status of the Claims**

Applicant would like to address an apparent error in the listing of the claims as pending in the summary page of the present Office Action.

The summary page of the Office Action lists claims 1-18 and 27-29 as pending. However, claims 1-30 are still pending, as only claims 31-33 have been canceled. Claims 19-26 were withdrawn but not canceled. Claim 30 is also still pending (and not withdrawn).

#### **§102 Rejection of the Claims**

Claims 1, 6-12 and 15-18 were rejected under 35 USC § 102(b) as being anticipated by DiGiacomo et al. (U.S. 6,085,831). The Applicant respectfully traverses this rejection and requests the Office to consider the following.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), M.P.E.P. §2131, 8<sup>th</sup> Ed., Rev. 4).

The Office Actions asserts that the sidewalls of heat spreader are the container barrier. Applicant respectfully disagrees. If DiGiacomo includes a container barrier, it is the O-ring 40, which is disposed on the die side of the heat sink enclosure 53 (which incidentally is not structurally what is understood in the art to be a heat spreader). The heat sink enclosure 53 of DiGiacomo is contemplated as a single heat sink, such that nowhere as part of the heat sink enclosure 53 is there a structural presence of a heat-sink side of a heat spreader as required in claim 1. Regarding the plug 60 of DiGiacomo even if this could be construed as the first channel limitation of claim 1, it is not “adjacent the heat spreader die side” as required in claim 1.

Because DiGiacomo does not teach what is claimed in claim 1, DiGiacomo does not anticipate claim 1. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 2-9 depend from claim 1 and are therefore also not anticipated by DiGiacomo. Withdrawal of the rejections is respectfully requested.

Regarding claim 10, it also has the limitations discussed above with respect to claim 1, that are not taught by DiGiacomo. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 11-18 depend from claim 10 and are therefore also not anticipated by DiGiacomo. Withdrawal of the rejections is respectfully requested.

#### §103 Rejection of the Claims

Claim 4 was rejected under 35 USC § 103(a) as being unpatentable over DiGiacomo et al. and further in view of Studebaker (U.S. 6,448,637 B1). Applicant respectfully traverses the rejection and requests the Office to consider the following.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (M.P.E.P. § 2143 8<sup>th</sup> Ed, Rev.4).

Studebaker's plug 30 is not disposed "adjacent the heat spreader die side" as required in claim 1, from which claim r depends. Because claim 4 depends from claim 1, which Applicant respectfully asserts is not anticipated by DiGiacomo, all the claim limitations of claim 4 are not taught in the cited references.

Claims 27-29 were also rejected under 35 USC § 103(a) as being unpatentable over DiGiacomo et al. and further in view of Homer et al. (U.S. 2002/0154483 A1). Applicant respectfully traverses the rejection and requests the Office to consider the following.

Regarding claim 27, it also has the limitations discussed above with respect to claim 1, that are not taught by DiGiacomo. Homer adds nothing to fill the void in the teachings of DiGiacomo. Because all the cited references, alone or in combination do not teach the limitations of claim 27, withdrawal of the rejection is respectfully requested. Applicant notes that claims 28 and 29 depend from claim 20 and are therefore also not rendered obvious by the cited references. Withdrawal of the rejections is respectfully requested.

*Allowable Subject Matter*

Claims 2, 3, 5, 13 and 14 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney, John Greaves at (810) 278-9171, or Applicant's below-named representative to facilitate the prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date March 15, 2006 By Ann M. McCrackin  
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 15th day of March 2006.

Chris Hammond  
Name

Chris Hammond  
Signature